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ABSTRACT

This publication from the Division of Health Services in the Denver Public Schools details new projects initiated in 1970-71. Some of these projects include a) extension of dental care in kindergarten through seventh grade and among pupils in the Neighborhood Youth Corps, b) initiation of rubella immunization centers in the elementary schools, c) development of a cooperative training project for school nurse practitioners, and d) initiation of evaluation studies on high school students with cardiac diseases. The report also presents the basic functions of the School Division of Health Services in providing education for children and youth. These services are designed to a) assure a wholesome school environment, b) detect conditions which would affect a child's learning activities, c) promote follow-up health care and correction, and d) assist in health instruction for all pupils. Recommendations for future activities include: a) in-service staff seminars for physicians; b) use of private physicians in approving students for sports involvement; c) exploration of educational needs of the deaf; and d) involvement of psychiatrists in secondary schools for problems of drug abuse, suicide, and violence. A list of all Health Services personnel is given. (BRB)

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DIVISION OF HEALTH SERVICES
Denver Public Schools

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FORTY-SIXTH ANNUAL REPORT

1970-1971

SP 007 623

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August 1971

Mr. Howard L. Johnson
Superintendent of Schools
414 Fourteenth Street
Denver, Colorado 80202

Dear Mr. Johnson:

This annual report, the forty-sixth from the Denver Public Schools Division of Health Services, is submitted to you, the members of the Board of Education, and other concerned individuals as a review of our activities, plans, and accomplishments in the 1970-1971 school year.

We share with our educator colleagues the intention of providing school experiences that are at once meaningful, pleasurable, and profitable for all the young people of our District. We believe that we contribute to the realization of such goals through our efforts.

We are proud of our schools, our part in their operation, and of the boys and girls with whom we are privileged to work. We are also grateful for the support given to us both within and outside the schools. Without the understanding and assistance of a host of people, particularly yourself and the members of the Board of Education, it would be impossible for us to do the work we do.

Sincerely,

John M. Lampé, M.D.

John M. Lampé, M.D.
Executive Director
Division of Health Services

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Doris Dore, R.N.
Celia Dunn, R.N.
Dora Hjort, R.N.
Mary Lou Hogan, R.N.
Carole Hoveland, R.N., Long-term
Patricia Kennedy, R.N.
Thelma Lederhos, R.N., Long-term
Janet Martin, R.N.
Jean Moser, R.N.
Ann Platt, R.N.
Kathryn Robbins, R.N., Long-term
Margaret Twining, R.N., Long-term
Carole Virtue, R.N.
Jane Will, R.N.
Nadia Wolke, R.N.

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FOREWORD

The preparation of an annual report provides opportunity for, indeed requires, our assessment of efforts over the year. The stockholders and officers of corporations expect and utilize annual reports in a very specific way. It is a meaningful document in the business world. So should it be in our "world." The preparation of this annual report occasioned the gathering of relevant data, its evaluation, and the formulation of plans for the future.

What has been done, the results of the doing, and indications for new activities are here. The impact of the many activities of the Division of Health Services is widespread throughout our school district. For example, this report indicates about 300,000 pupil contacts and 2,363 employee contacts occurred last year. Hopefully, they were all meaningful to the recipients and some benefit accrued to each and to the district, too. Unfortunately, there are many intangibles in the area of health services as indeed there are in education itself. It is all but impossible to assess the effects of advice given to an athlete about nutrition, to parents on the urgent need for vision or hearing care for their child, or the recommendation to a teacher for medical consultation and a whole host of similar activities. Despite this difficulty, we have tried to account for our efforts. We sincerely believe they contribute to the better education of pupils and ultimately to the best interests of the entire community.

We want to extend our sincere appreciation to the many people who have participated in and made these activities possible--

- to the Division staff,
- to the Superintendent,
- to school administrators,
- to the Board of Education
- to teachers,
- to parents,
- to health professionals,
- and to the boys and girls of our schools.

I. NEW PROJECTS AND ACTIVITIES OF THE SCHOOL HEALTH SERVICES - 1970-71

A. A cooperative training project for school nurses to become School Nurse Practitioners

During the 1970-71 school year, the Pilot Program for School Nurse Practitioners moved into the implementation phase. In September 1970, four Denver Public Schools' Nurses were granted sabbatical leaves to attend a four-month theory session at the University of Colorado Medical Center. In addition to the Denver Public Schools input of leave funding and Division of Health Services personnel, two grants from the Bruner Foundation and Commonwealth fund were obtained. The University of Colorado Medical Center personnel have joined with the Denver Public Schools' Division of Health Services to set up a co-ordinated theory and practice approach which has been, in this brief period, very effective. The four nurses returned to their schools on February 1, 1971 for the eight-month practicum. During this period, a three-hour conference each week with a pediatrician is provided by the project. In March 1971 a grant from the National Center for Health Services Research and Development was approved for continuation of the project. In September 1971, eight School Nurse Practioners will be in the Denver Public Schools while four school nurses will be attending the theory sessions.

An evaluation of the project is currently underway. There are some observable changes in the quality of service to children. The School Nurse Practitioner is functioning on a higher level of understanding and judgement in child health care. Utilization of the school physician has become more appropriate to this high level of preparation. Statistical data and documented information regarding the Pilot Program will be available in the 1971-72 school year.

B. Development of more medical staff inservice on detection and management of learning problems among children

In accord with changing demands for medical consultation, a series of seminars is planned for the 1971-72 school year for the medical staff to acquaint them with current concepts, techniques, and research in the general area of learning problems in children. Multiple, relatively short sessions with resource persons from both education and medicine will begin in the fall in such areas as language problems, behavioral changes, cerebral dysfunction, and psycho-educational problems.

C. Help with interdisciplinary planning for Complex I and Complex II Schools

The advisory committee for specialized services in the ten elementary schools in Complex I and the 12 elementary schools in Complex II convened regularly to consider improvements in meeting pupil, teacher, or administrative problems in this geographic area of the city.

Such matters as processing problem children for special study; inter-disciplinary teamwork of the nurses, social workers, psychologists, and physicians; and handling school or behavioral problems were discussed and clarified. Occasionally, one or more schools had tried new methods of work which were reported and discussed to the benefit of the other schools. Thus, the complex goals of coordinating efforts to solve mutual problems are being fulfilled in some measure. A cooperative spirit prevails and more progress is anticipated as we continue to work together on various needs in these two groups, "clusters," of schools.

D. Assistance in training teacher aides in the Diagnostic Learning Center

The Division of Health Services has continued to assist in the training of aides in certain specialized areas such as the "Educationally Handicapped" program. These aides volunteer their time to assist teachers in their work. The aides are better prepared and more effective because of the inservice program.

E. Participation in the statewide immunization survey via parent questionnaires initiated by the Colorado Department of Health

In April of 1971 a statewide survey of immunization status of school-age children was undertaken by the State Department of Health. The Division of Health Services participated and will have the results available in the fall to use in later program planning. Continued study of this and other data is planned within the Division of Health Services so further control of communicable diseases is assured.

F. Dental Hygienist survey of dental health of kindergarten through 7th grade pupils in all schools

During 1970-71, for the first time in six years, each of the 91 elementary schools was checked by the dental hygienist in order to ascertain the level of dental health in every school. The past few years, dental education (but not dental inspections) had been done in all schools, but about a dozen schools in areas utilizing high levels of private dental care were not inspected by the dental hygienists.

Although dental disease remains the most prevalent physical defect among those of school age, some progress is being made.

The great need continues to be preventive care, as much, or perhaps more than, curative and treatment facilities. To prevent a cavity is preferable to filling it! Hence, future planning for the dental programs in the schools will give more emphasis to better daily brushing and to local flouride applications to selected groups at high risk.

G. Special rubella immunization clinics in selected elementary schools, in cooperation with city and state health departments

Citywide efforts in surveillance of communicable disease identified two schools with unusual incidence of rubella in the spring of 1971. The city and state departments of health, with the cooperation of the Division of Health Services, initiated immunization clinics on a schoolwide basis at Greenlee and Fairmont Schools to cope with the situation. Continuation of disease surveillance and associated problems is considered a high priority activity.

H. Termination of school dental clinic

By action of the Board of Education, the school financed and directed clinic ceased to exist as of June 1, 1971. This decision to reduce school costs and withdraw from a treatment program terminated over 40 years of excellent service to needy children in the public schools.

It is estimated that an average of about 2,000 students received dental care each year, largely those unable to get care elsewhere. Meetings have been held with dental and public health leaders to explore possible alternative ways to continue the important work of this clinic.

The Board of Education affirmed their interest in health of children by offering to continue to give space and a budgetary allowance for supplies if salaries, the major cost item, could be obtained from out-of-school sources.

A new type of Community-School clinic is being discussed with the Metropolitan Denver Dental Society but the Dental Clinic, as a specialized part of the total school health program, has been abolished.

I. Completion of plans for citywide extension of the kindergarten parent-school nurse interview

Since 1967-68, a tentative plan in selected schools for a kindergarten parent-school nurse interview has been carried out. The schools included on a voluntary basis have increased each year. Greater understanding of the procedure as a tool to provide improved child health care and parent education has taken place. Therefore, it is recommended that beginning in 1971-72 this procedure be included as part of the Division of Health Services program. Thus, the identification of significant factors which affect future learning and success for the child will become possible. Further it has long been recognized that in certain crisis periods, more impact for change and understanding exists. School entrance is viewed as a highly significant period for both parent and child. A continuing orientation for school nurses to increase understanding of the tool and to learn appropriate interpretation of findings is planned.

J. School nurse involvement in certain techniques of behavior modification such as groups, standby, and rewards for positive behavior

Since emotional concerns and maladaptive behavior of children is increasingly reported as a parent and teacher cry for help, school nurses recognize the need to increase their skills in this area. As a result of inservice for the nursing staff from community mental health and educational facilities, a significant number of Denver Public Schools' nurses are able to implement certain behavior modification techniques in the schools.

Small group conferences with pupils under school nurse leadership are provided as one technique. These group meetings supply a forum to pupils for consideration of personal concerns. Standby is a technique which is used to afford a one-to-one adult relationship for a brief period, to the child in need of immediate attention, for overt behavior, and designated as "in need" by teachers, staff, or self.

This program has been a positive effort on the part of the school nurses in helping children, thus deemed an appropriate area for nurses in a school setting.

K. Setting up health evaluations for about 1,000 pupils in Neighborhood Youth Corps work and/or study summer programs

With increased federal funding this spring and summer, several hundred more youth, 16-21 years of age, were recruited for either work, or study, or combined programs. Financial subsidies were available for about 1,500 high school age students from disadvantaged families.

The Division of Health Services was asked to plan, organize, and carry out practical health evaluations on as many as possible of these young people. At three locations and at various times in June and July, nursing, medical, and other personnel were recruited in teams to do these health appraisals. About 1,000 students were examined. Specific summaries for each of the groups have been made to the Neighborhood Youth Corps officials.

In general, the findings again showed a significant number of these students had health problems that had interfered with their earlier attendance or participation in school. Both physical and emotional conditions were detected that will receive continued attention toward possible remediation.

A new aspect of this year's programs was the use of school nurse practitioners and pediatric nurse practitioners to do the major part of the physical examinations. Physicians rechecked all suspected abnormalities. An experienced school nurse met with each student at the conclusion of the screening tests and physical examinations to discuss a health care plan for him. Further follow-up attention will be given by the high school nurses during the coming school year so the maximum corrections may be obtained for the health defects on all students.

L. Prophylactic dental project for selected Neighborhood Youth Corps students

One dental hygienist was scheduled for about five weeks to perform cleanings, apply topical flouride, and do dental education for many of the Neighborhood Youth Corps students needing better oral hygiene. This was our initial attempt to concentrate prophylactic attention on this age group of needy students.

M. Planning increased emphasis on dental prophylaxis in 1971-72

The dental hygienists have been meeting regularly during the past semester to develop a plan for approximately ¼ of their time to be spent in actual chair-side prophylaxis this coming year. Many students in serious need of cleaning and gum care have no source of help at this time. Such a school dental program would be a distinct service to the needy pupils who are not receiving either private or public dental care. Dental problems remain such a major one that preventative efforts assume great importance in the role of school dental hygienists.

The exact schedule for the dental hygienists to perform these services in the schools is being worked out--as to how to spend their time; on what students; and in which areas of the city. Continuing into 1971-72, study of optimal use of dental hygienist services will be undertaken.

N. Cooperative project with the Colorado Heart Association for work evaluation studies on high school students with known cardiac disease

As an initial pilot program, the Division of Health Services of the Denver Public Schools had an opportunity to become involved with a special community health project involving both public and parochial schools and centering around vocational and health counseling of senior high school age adolescents with cardiac problems.

Through the Colorado Heart Association's Work Evaluation Unit at Spalding Rehabilitation Center in Denver, under the direction of L. Loring Brock, M.D., Director, this project was initiated and guidelines established. Considerable time and effort was expended by Denver Public Schools' high school nurses and counselors to assure success of this venture since it is a well accepted fact that most adolescents are far more concerned with today's living rather than planning for future vocational objectives. In addition, adolescents are known to deny any differences which might set them apart from their peers. Despite these difficulties, the rewards, as seen in the excellent support of the Rehabilitation Unit's staff and especially Dr. Brock, have made this a project well worth undertaking.

Since school counseling for those adolescents going to college is a well-developed part of curriculum planning, those students who were seeking non-academic careers with possible heavy physical requirements were those primarily sought. In the vocational planning at the Rehabilitation Unit, either the school nurse or counselor or both were involved as team participants sharing information known from the

adolescent's school achievement and skills. Resulting from this team approach, where the Rehabilitation Unit measured the current nature of the adolescent's heart problem and his or her ability to handle high-level exertion with a projected potential to carry similar work loads with increasing age, an assessment of the student's interests was considered in light of his present and projected abilities. Because of the involvement of essential school personnel such as the nurse and vocational counselor, reinforcement of the evaluation can be maintained and contact kept with the student.

The success of the pilot program has encouraged all participants that this is a worthy project in assisting adolescents. As such (thanks to the support of school personnel and the community agency), the program will be continued, encouraging high school sophomores and all newly enrolled high school students with cardiac problems to participate in the 1971-72 school year.

O. Changes in policies for health clearance for high school students participating in varsity sports

A study of school district policy in regard to participation in varsity sports (that included varied points of view from interested persons in the community and in the school district) resulted in the recommendation that the Denver Public Schools' practices be altered for the coming year. Concommitant changes in policy by the Colorado High School Activities Association permitted new guidelines under which health evaluations are now accepted from private physicians and need not be done immediately prior to the September sport programs.

P. Development of new nursing records to report and tabulate various responsibilities of the Division of Health Services

Evaluation of service is a continuing process. Record keeping is an essential element in that process.

Involvement may be a technique or a method toward understanding and proper use of procedures. Using this approach, a School Nurse Committee has been given broad responsibility to modify records used by the division of Health Services.

These records for reporting findings and follow-through activities are not in finished format. In the fall each nurse member of the Records Committee will meet with a small group of nurses to discuss the tentative forms and eventually to receive feedback.

Several records have been deleted. Many records were markedly modified, but the final decisions will be made in 1971-72 with input from those who use the tool.

Q. Survey of hearing losses relative to ethnic groupings

In response to a report* that an audiometric survey in the Milwaukee schools showed "the white children had a significantly higher rate of

* "Race as a Variable in Hearing Screening," American Journal of Diseases in Children, Vol. 120, December 1970, pp. 547-550.

failure (7.4%) than did the black children (2.7%)" we were stimulated to collect and analyze the data for the past three years among the Anglo, Black, and Hispano school groups in our city. The ethnic backgrounds had already been tabulated as shown in columns 1, 3, and 5 of the following chart. Routinely, the kindergarten, first, the third grade children are tested with a Pure-tone audiometer. The three groups of schools were very similar in total enrollments, totaling about 5,000 pupils in each group. The economic status of the Black and Hispano schools were quite similar.

PERCENT OF HEARING LOSSES FOUND IN THE ELEMENTARY SCHOOLS, SELECTED BY DOMINANT ETHNIC GROUPS ON THE BASIS OF ESTIMATED DATA 1968-1971

	SCHOOL	1968-1969 (1) % of Enrollment	1968-1969 (2) % Hearing Loss	1969-1970 (3) % of Enrollment	1969-1970 (4) % Hearing Loss	1970-1971 (5) % of Enrollment	1970-1971 (6) % Hearing Loss
	COLUMBINE	94.77	7.3	97.2	8.2	95.2	8.4
B	HARRINGTON	77.67	2.5	76.3	0	78.42	6.4
L	MITCHELL	72.39	9.7	70.9	12.6	69.86	11.4
A	SMITH	94.89	5.2	91.7	9.7	95.27	9.4
C	STEDMAN	92.2	4.3	92.7	2.1	93.02	2.1
K	WHITTIER	94.1	12.7	94.0	10.6	90.37	1.0
	AVERAGE % HEARING LOSS		6.9		7.2		6.4
H	BRY-WEB.	75.66	14.4	75.5	14.4	76.9	7.7
I	ELMWOOD	82.83	8.4	91.6	13.0	87.82	19.3
S	FAIRMONT	89.0	15.7	79.9	17.5	74.49	10.8
P	FAIRVIEW	64.1	28.1	83.2	26.5	79.29	16.4
A	GDN. PLACE	55.87	19.6	64.7	12.3	65.09	13.8
N	GREENLEE	54.45	25.9	73.0	15.0	76.93	20.7
O	SMEDLEY	60.0	8.3	77.0	51.9	72.08	8.3
	AVERAGE % HEARING LOSS		17.2		21.5		13.8
	BRADLEY	98.49	16.3	97.7	16.3	96.9	7.2
A	ELLIS	98.1	7.1	88.5	7.8	88.0	6.8
N	GUST	92.43	10.8	93.2	9.6	91.29	1.2
G	KNIGHT	98.38	1.0	92.9	3.2	89.54	3.3
L	TRAYLOR	96.54	5.1	96.9	9.2	96.65	6.1
O	SABIN	96.82	11.3	96.1	10.4	94.63	5.2
	AVERAGE % HEARING LOSS		8.6		9.4		4.9

The obvious finding in this survey is the double incidence of hearing losses among Hispano children when compared to either Black or Anglo pupils. A three-year average rate of hearing losses (data in columns 2, 4, and 6) for each ethnic group was as follows:

(a) Black 6.9%
(b) Anglo 7.6%
(c) Hispano 17.5%

The reasons for the significant difference between Hispano pupils and the other two groups are not easily determined or explained on the basis of current information. Nor did this analysis of data reveal any significant difference between Blacks and Whites. The matter of ethnic factors, predisposing to physical defects or hearing problems, is one needing further study.

R. Participation in a series of TV programs on child health in coperation with the Rocky Mountain Academy of Pediatrics

It is anticipated that an educational TV series similar to that produced in 1970-71 will be undertaken in 1971-72. The 1970-71 series, in the general area of child care and done cooperatively with the American Academy of Pediatrics, was well received and public interest evidenced in such programming. The 1971-72 series will give more attention to child behavior as well as child health and will cover a wider age range of children. Specifics of the program are not now completed but will be announced through regular channels when available.

S. Selective throat culturing in certain elementary schools

The Division of Health Services has long been concerned with the problem of streptococcal infections of sequelae. With the introduction of the S.N.P. (School Nurse Practitioner), opportunities heretofore unavailable were realized. In conjunction with the State Department of Health, facilities for throat cultures have been worked out so that the S.N.P. with her training can, upon indication, do the culture and utilize the information obtained to better serve the child.

T. Elementary teacher evaluations of the dental hygienist educational programs during the 1970-71 school year

Questionnaires were developed by the hygienists and the central office staff to try to learn more about the relevance and effectiveness of the dental education program in the classroom.

Many teachers responded from about 80 of the elementary schools. The questionnaires were returned, unsigned, after the dental hygienist had completed their programs in each school.

On the dental hygienists' talks, three queries were asked:

(1) were they appropriate for grade level or above or below level of pupil comprehension;

(2) should the talks have motivated pupils to improve their dental habits; and

(3) were the presentations (techniques, voice, etc.) satisfactory

The results were as follows on the basis of teacher agreement or disagreement in five gradients of opinions.

	Agree	Disagree
1. (a) *Appropriateness for grade level	406	14
(b) *Above level of comprehension	71	186
(c) Below level of comprehension	39	207
2. Motivational appeal	409	11
3. Satisfactory presentation	358	42

*These two aspects of the results are somewhat puzzling--when 1. (a) indicated general teacher approval of the grade levels at which the sequential units of dental education have been placed.

The next question listed what kinds of school personnel should teach the dental health units. Here the preferences are totaled:

	Agree	Disagree
(a) the teachers	225	18
(b) the dental hygienists	311	10
(c) the school nurse	193	20
(d) others--as dentists	2	0

It was apparent by some written comments on the responses that the "agree" and "disagree" columns were not always understood. Perhaps, the general trend of the teachers' opinions are indicators, however, for future planning of the dental program in the classrooms. It should be an important part of the school health services because dental disease is the most prevalent one among school-age children.

The teachers who filled out the quesrionnaire are hereby thanked for their interest and ideas that we hope to use for improving the classroom dental programs.

U. Transfer of the writing, production, and distribution of the Health Information Bulletin from the Health Services to the General Curriculum Services

After 20 years of writing and distributing this Bulletin, the Health Services offered it to the General Curriculum Services as a very appropriate aspect of their work for the future.

It has been apparent for some years that the monthly informational Bulletins, originally developed as an inservice media to our own nursing and medical personnel, had steadily grown to schoolwide distribution. Administrators, faculties, and some PTA leaders requested copies until about 4,000 (going to more teachers than any other group within the schools) copies of each of the six issues were distributed during 1970-71.

Occasionally, we asked for reader suggestions as to content and health questions were always welcome.

In addition, items were regularly included from medical, nursing. public health, and school health journals that were deemed of probable interest to the readers.

As the Health Information Bulletin goes to its new sponsor and "home" in the General Curriculum Services, we anticipate its continued service and worth to promote school health and recall happily its years of being in the Division of Health Services.

We will be pleased to retain one page, or some space, in each issue for review on data of important health matters in the schools as known to the health services specialists. The Bulletin has a promising future to promote health instruction for teachers, parents, and all pupils.

V. Special Vision Screening Study by volunteers at a high school

In the spring of 1971, for the second year, volunteers screened all the sophomore students at South High School. The volunteers gave accurate and dependable assistance to the school nurse as the test procedures were expanded from doing only an acuity test (Snellen) to doing two other tests, i.e.

(1) One for hyperopia, using a plus-sphere lens (1.75 diopters) with the Snellen chart, and

(2) One for stereopsis or bilateral fused vision (for depth perception) with the American Optical Company chart.

These two latter screening procedures were added to help determine if the Snellen test alone would miss a few students who would be screened out by the additional tests as potentially in need of referrals to more complete vision evaluations and care.

METHOD OF DOING THE THREE SCREENING PROCEDURES:

1. Visual acuity was checked by using a Snellen letter chart at 20 ft. distance,

2. Those who passed this test put on a pair of spectacles with plus-sphere lens (1.75 D) and tried to reread the Snellen test with both eyes. If they could read as well with the lens—they failed the test because their eyes were hyperopic,

3. All students were given stero tests arranged in a declining and sequential order on a page. Those with eye muscle balance to have adequate depth perception could see accurately and readily the first 6 of the 9 stero designs.

VOLUNTEER RESPONSIBILITIES AND PATTERN OF WORK:

Eleven volunteers contributed a total of 105 hours while doing 30 class groups of sophomores. The latter came to the health room during their 45 minute vocational education classes.

Of the 11 volunteers, 6 were experienced—from last year's program--and 5 were new. As was anticipated, combining an experienced person and an inexperienced one produced a team that worked effectively together as well as providing a sense of security which left the nurse free to do other work and permitted reasonable team speed from the beginning.

In an evaluation meeting with the school nurse and volunteers, it was agreed that the following aspects need to be continued for a successful program:

1. Recruitment of volunteers should come as school is opening.

2. Orientation by the school nurse in September—for both experienced and inexperienced people—is most desirable.

3. Combining experience and inexperience on each team is important.

4. Appropriate class orientation just prior to testing makes students much more cooperative and receptive (including clarification that volunteers will be doing the testing).

5. Sharing results with volunteers keeps their interest level high. They need to KNOW how much they contribute.

FINDINGS:

1. Total number of students screened 783

2. Total already wearing contact lens or glasses and screened as "O.K.". 244 (31.2%)

3. Total number suspected on Snellen test to have deficient vision (and therefore referred at once for further care) 67 (8.6%)

4. Total number of (3) who already were wearing glasses or contacts who failed the acuity test. 21 (2.7%)
   (a) those with contacts. 7
   (b) those with glasses 14

5. Total number of students who failed plus-sphere and/or stereo. 54
   (a) total number of this group who failed the Snellen Screening test. 20
   (b) total number who passed Snellen, failed the plus-sphere at their Snellen line but could read the next larger line--so they might be somewhat hyperopic. 6
   (c) total number who failed the stereo test, i.e. could not identify more than the first 3 stereoptican circles out of the 6 diamonds. 20
   (d) total number who failed the stereo test but passed the visual acuity and the plus-sphere screening tests. 7

SUMMARY

In summary, the three tests seemed to be done efficiently and adequately by the volunteers. During this pilot project, tabulations showed that of the 783 sophomores tested:

..... 31% already wore artificial lens to correct their vision,

..... another 2.7% had been given corrective lens but still seemed to have less than 20/40 visual acuity in one or both eyes,

..... an additional 8.6% of the students failed the Snellen test and were referred for further care,

..... 7 more students who passed the Snellen screening test and and the plus-sphere test failed the stero test, and

..... possibly 7 more students who passed the Snellen have sufficient hyperopia to warrant further attention to their vision.

Thus, 14 (1.8%) of the total group of 783 students may have visual deficiencies which would not have been found by using only the Snellen test in this high school screening project.

Continued careful evaluations of these test procedures should be carried on, with consultant medical assistance, to develop the most efficient and effective vision screening program for secondary students.

W. Assistance with a series of 8 seminars on health topics for all school personnel in Complex II

The health interests of the 250 teachers in the 12 schools in this area of the city were solicited and tabulated. Emotional health, drug education, better teacher observation of pupils, classroom management, detection of perceptual damage, community resources, special education, and role of vision in dyslexia were the leading topics suggested for this series of weekly inservice meetings.

Despite the majority of teachers voting favorably for the proposed series--and selecting their own topics, participation was quite limited. The eight sessions were programmed with a discussion leader and some teachers attended regularly. The size of the groups varied from 8 to 30 teachers.

At subsequent meetings of both teachers and administrators, it was decided to ask for some inservice next year but for less time and on only two subjects: drug education in elementary schools and classroom management. Joint planning within the Complex will give attention to meetings on these two topics.

X. Special community V.D. project

Through the efforts of state and local health authorities, a communitywide attack was launched on V.D. this past May and June. The initial idea and development of visual aides came from a class in Communicative Arts at the University of Denver. Thus, youthful approaches and standard epidemiological services were combined to promote awareness of, and control measures for, the increasing infections of syphilis and gonorrhea. A "hot line" was established and manned by young persons; additional clinics were opened to accommodate patients extra hours; and medical and nursing personnel volunteered their time to staff them or assist in school and community educational meetings.

II. BASIC FUNCTIONS OF THE SCHOOL DIVISION OF HEALTH SERVICES IN THE EDUCATION OF CHILDREN AND YOUTH

A. Health Services to assure a safe and wholesome school environment

1. Selection of healthy adult employees

Medical and health evaluations are a basic service performed by the school medical staff.

Pre-employment appraisals are required on teachers, clerical staff, maintenance, and all other personnel. Last year pre-tenure appraisals were done on 469 teachers, and 528 pre-employment medical appraisals were done on new teachers. Routine bi-annual medical appraisals were done on 156 lunch-room workers and medical appraisals were done on 328 new lunch-room workers. Annual medical appraisals were made on 153 bus drivers. There were 128 applicants for clerical work who were seen by the medical staff; 35 nurses, social workers, and other employees; 905 substitute teachers; and 97 maintenance personnel. Thus, a total of 2,877 employees were given medical appraisals in 1970-1971. In addition, 300 health conferences were held with many school employees to assist them with their health problems and needs. This is approximately the same work load performed in 1969-1970 when 3,000 new and regular employees were given health evaluations.

2. Implementation of city health and building regulations

In cooperation with various municipal departments, the standards for new buildings and grounds, gymnasiums, pools, shops, and lunchrooms are maintained. City sanitarians have been helpful in promoting high standards in swimming pools and lunchrooms and kitchen facilities. Extra attention was given to plumbing and food services in one elementary school during the year when an undue number (17) cases of infectious hepatitis occurred during the December-June period of time. The sanitation standards were found adequate and without implication for this persistent virus infection that occurred among the pupils in this school.

3. Application of control measures to stop the spread of illnesses

a. Implementation of official health rules

By the regulations of the Bureau of Health and Hospitals, adults and pupils who are ill are excluded from, and re-admitted to school. There were no serious outbreaks of communicable diseases last year although streptococcal diseases still hold at a steady incidence while other common childhood infections are declining. Despite the incidence of infectious hepatitis in one elementary school there was no general increase in our schools and only 58 cases were reported among our enrollment of 96,000 students.

b. Prompt attention to ill children and exclusion from school

It is the policy of the schools to exclude pupils who are ill. During the past year, 20,426 such exclusions were made of elementary children, 16,424 of junior high school, and 9,859 high school pupils. This total of 46,709 exclusions was 5,939 more than in 1969-1970, possibly because of more chickenpox in many schools.

The nurses do classroom inspections at times of threatened epidemics. They routinely screen elementary pupils for scalp ringworm in the schools where cases have occurred the past year and thereafter in schools exposed to this fungous infection. In 1969-1970, 15,132 inspections were made by nurses, using the special ultra-violet filtered light, and 32 cases were found; by the close of this last school year, 13,348 inspections had been made and 16 cases had been found. All except one case was cleared by the closing of school. The majority of cases used the new oral medications now available for ringworm infections.

During the past year, infectious hepatitis was reported in 58 pupils. The prior year, 65 pupils were known to have had infectious hepatitis so the disease was about stationary among those of school age or was not reported adequately. The preceding year, i.e. 1968-1969, 172 pupils were reported to the city health department to have infectious hepatitis so the past two years have been more fortunate.

4. Health consultations and periodic evaluations on adult personnel

By established policy, school employees report to the medical staff in the central office when returning to work after illnesses or accidents either causing twenty days or more loss of work or being of a nature to warrant medical clearance. Last year 206 employees were seen by the school medical staff after such absences although 142 had been seen in 1969-1970. In addition, periodic examinations and special health conferences are available upon request as physician time allows. It is thought these and other professional contacts with personnel are worthwhile if they add to the fitness of the adult employees.

B. Health services to detect conditions among pupils which would diminish their most effective participation in educational activities

1. Routine screening tests for vision, hearing, physical growth and dental health

Increasing attention is being given to learning disabilities among pupils. Medical and nursing skills are utilized frequently to counsel with these children and their parents, as

well as faculty members. Subtle neurological changes, maturational lags, and emotional blocks to school progress are more difficult to evaluate, diagnose, and correct than are usual sensory impairments. However, one of the basic responsibilities of school health personnel continues to be the accurate detection of these conditions that interfere with the learning and to aid in the follow-through efforts for correction of the defects.

Children who must repeat grades, who perform poorly, or who get discouraged and quit school because of poor general health, faulty vision, hearing, or other deficiencies are costly failures to any community. Therefore, careful screening tests are used whenever possible to detect the conditions that would decrease optimum learning.

In 1970-1971 the following conditions were screened and the numbers listed below were reported to be in need of further medical attention:

	ELEMENTARY	JR. HIGH	SR. HIGH	TOTALS
VISION:				
Number tested	30,863	9,424	7,450	47,737
Number referred for follow-up attention (after two checks)	3,187	1,127	702	5,016
Number already wearing glasses*	1,751	1,393	1,232	4,376
HEARING:				
Number tested	27,592	2,508	1,555**	31,655
Number referred for follow-up attention	620 2.2%	94 3.7%	72 4.6%	786 2.4%
GROWTH: (Annual Weighing)				
Number weighed and measured	51,356	5,586	4,216	61,157
Number referred for follow-up attention	597	216	150	963
DENTAL:				
Number inspected	40,064	5,807	0	45,871
Number referred for follow-up care	9,705	1,116	0	10,821
Number needing better brushing	9,727	1,116	0	10,843

*There were 2,837 additional pupils known to have obtained glasses, initially, during the year. This was 403 more visual corrections than the previous year.

**This group was composed of new pupils in the high schools and all those with known or suspected hearing losses from previous tests.

Further audiometric evaluations were given, at the central office, to 382 school children, 68 preschool children, and 17 employees. In addition, speech and hearing-aid evaluations were done on 43 individuals during the past year.

Color-vision tests are routinely done through the science and/or guidance programs in the seventh grade. Kodachrome slides of seven selected Ishahari Charts are used to screen test classroom groups. Later, nurses give the individual pseudo-isochromatic color-vision tests to the pupils who fail the group test. The school nurses then counsel pupils and their parents and share information with the guidance, vocational, art, and science teachers regarding the few pupils who are color deficient in their vision.

The amount of color-vision deficiency holds quite consistent. Whereas in 1969-1970, 2.9% of boys and 0.24% of girls were found to have color-vision deficiencies, in 1970-1971, 3.0% of boys and 0.3% of girls were found to have some color-vision deviations.

During 1970-1971 the following results were obtained as shown on the chart below.

SCHOOL	BOYS			GIRLS		
	TOTAL NUMBER TESTED	NUMBER RECHECKED BY SCHOOL NURSE	NUMBER & PERCENT WHO SEEMED COLOR DEFICIENT	TOTAL NUMBER TESTED	NUMBER RECHECKED BY SCHOOL NURSE	NUMBER & PERCENT WHO SEEMED COLOR DEFICIENT
Baker	131	7	6(4.6%)	129	3	2(1.5%)
Byers	204	31	12(5.9%)	205	5	0
Cole	121	13	0	107	11	0
Gove	124	16	1(0.8%)	106	18	1(0.9%)
Grant	118	24	9(7.6%)	131	21	2(1.5%)
Hamilton	336	63	11(3.3%)	300	41	0
Hill	186	12	10(5.4%)	181	0	0
J.F. Kennedy	264	18	10(3.8%)	259	9	1(0.4%)
Kepner*	-	-	-	-	-	-
Kunsmiller	301	17	2(0.7%)	358	9	0
Lake	192	28	10(5.2%)	199	13	0
Horace Mann	193	33	3(1.6%)	181	39	0
Merrill	227	18	10(4.4%)	213	12	1(0.5%)
Morey	126	8	2(1.6%)	102	6	1(1.0%)
Rishel	191	17	9(4.7%)	214	2	2(0.9%)
Skinner	204	35	16(7.8%)	206	23	1(0.5%)
Smiley	276	55	11(4.8%)	277	54	0
Boettcher	12	4	2(16.7%)	0	0	0
TOTALS	3,206	399	124(3.9%)	3,168	266	11(0.3%)

*Kepner did not do color-vision tests this year—will do both 7th and 8th grades in 1971-1972.

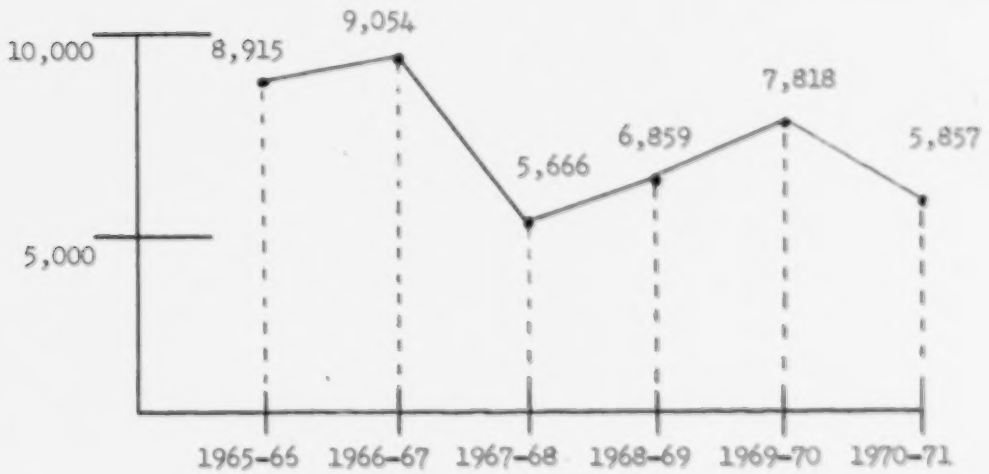
2. Periodic medical appraisals to evaluate general development and significant physical conditions and defects

The part-time examining physicians were scheduled among the schools and appraised the health and physical conditions of new pupils, of those referred for suspected defects, and of those with other special needs for whom parents had requested such appraisals. Partial health histories are gathered from all pupils as a part of this health appraisal. Parents of elementary school children are given definite appointments and urged to come to school on the day of the doctor's visit.

Parents of junior high school pupils having health appraisals are notified and encouraged to come if they wish to discuss any special health needs. The older pupils, as in high school, prefer to be more self-directive during the medical appraisals and counseling and parents are not invited routinely to attend the school physician examinations.

Continued and strong emphasis is given to the participation of private and clinic physician in the periodic medical evaluations of all children and youth. Special record blanks are provided to family physicians and to the community health clinics. The Division first printed such blanks for the private physicians in 1942. It was hoped these would provide a record of pupil health information known to the family physician and save duplication of medical services by the schools.

The returns for the past six years are as follows:

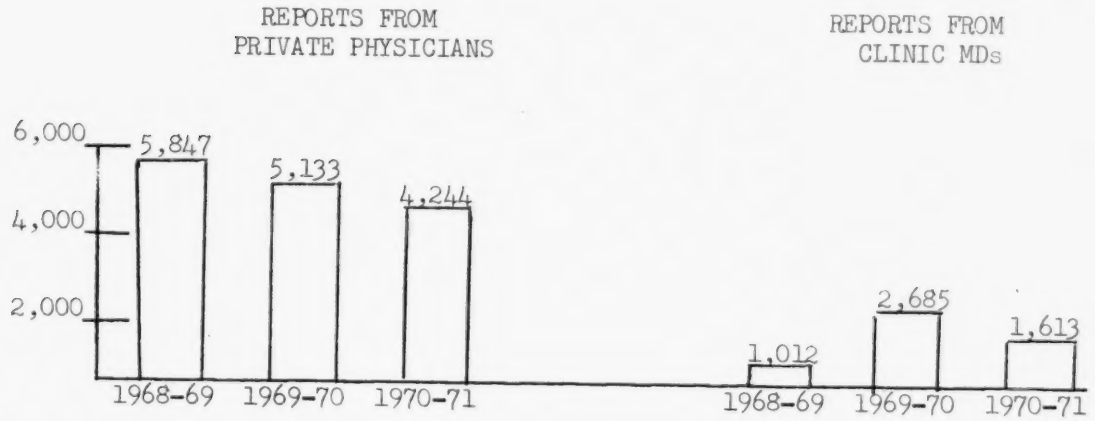


The 1970-71 data are shown below in comparison with the 1969-1970 data:

	1969-70	1970-71
Medical reports from elementary schools. . .	6,083	4,239
Medical reports from junior high schools . .	1,161	1,073
Medical reports from senior high schools . .	574	545
TOTALS	7,818	5,857

The decrease of 1,961 reveals much more emphasis must be placed on obtaining medical reports from the attending physicians whenever they are rendering regular services to pupils. The time of school physicians should be directed to children who do not have regular medical care.

The medical reports from private physicians and public clinic physicians are now tabulated separately. The new network of federally-funded city health clinics is allowing more services to pupils. Of the 5,857 physicians' reports, 1,613 (27%) came from the city hospital pediatric department and the Neighborhood Health Centers. Private physicians sent in 73% of the reports and the three-year responses are shown below:



Pupils seen by the school physicians for regular and recheck appraisals during 1970-1971 were as follows:

		ELEMENTARY		JR. HIGH		SR. HIGH		TOTALS	
		BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS
GENERAL MEDICAL APPRAISALS	Pupils New Referred, etc.	2,411	2,165	860	847	339	285	3,610	3,297
PARTIAL MEDICAL APPRAISALS	Re-checks	17	18	42	42	21	13	80	73
	Swim	18	18	195	173	325	393	538	584
	Varsity Sports	4	0	23	0	1,786	473	1,813	473

Parents came with the elementary children for 1,306 (28%) of the 4,651 medical appraisals being done by the school physicians. A total of 6,907 routine medical appraisals were done and 3,580 partial medical appraisals for a grand total of 10,487 pupils. In addition some high school young men were given medical inspections for the ROTC-NDCC programs before school began. The total 10,487 students seen by school physicians this year was 1,569 less examinations than done in 1969-1970.

Below is a list of the more common conditions and defects found on routine medical appraisals:

	ELEMENTARY		JR. HIGH		SR. HIGH		TOTALS	
	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	NO.	%
1. Poor health habits*	547	512	36	139	12	27	1,273	18.4
2. Heart Murmur (Innocent)	212	188	34	49	11	12	506	7.4
3. Ears	168	175	9	32	4	8	396	5.7
4. Throat	170	144	19	39	3	19	394	5.7
5. Eyes	117	106	21	43	5	6	298	4.3
6. Skin	97	94	21	32	15	21	280	4.1
7. Orthopedic	87	69	32	42	23	9	262	3.8
8. Nutrition	54	60	20	26	6	15	181	2.6
9. G.U. and Hernia	71	12	30	7	2	3	125	1.8
10. General poor health**	41	42	3	19	2	4	111	1.6
11. Heart murmur (Organic)***	12	10	1	0	0	1	24	0.3

*Health habits are considered "poor" when they definitely hinder the best growth and functioning of an individual. Faulty diet, no breakfast, inadequate sleep, overstimulation, and neglected personal hygiene are conditions considered to be poor health habits.

**General poor health tabulates those with frequent colds, earaches, stomach trouble, and so forth.

***Murmurs are recorded as organic and are referred for further diagnostic attention whenever the school examining physicians believe or are suspicious that the murmurs are typical of organic disease. It is thought preferable to over-refer rather than miss early cases of organic heart disease.

3. Screening tests on preschool children for hearing and vision

a. Hearing

Well-trained volunteers from the Delta Zeta Sorority carried out the common-sounds test in Pure-tone audiometry on all preschool children.

Mrs. Marion Downs, clinical audiologist at the University of Colorado School of Medicine, continues to serve as consultant.

Last year eighty perschool groups were done with the following results:

(1) Total number given common sounds test. 1,091

Results:
Number of children who heard normally. . . 998(91.5%)
Number of children unable to be tested . . 49(4.4%)
Number of children who did not hear certain sounds. . . . . 93(8.5%)

(2) Total number of children rechecked at the Division of Health Services by June 1971 of the 93 above. . . . . 68(73.1%)

Results:
Normal . . . . . 54(79.2%)
Given medical referrals. . . . . 8(11.8%)
Dips(to be rechecked next year). . . . . 7(8.8%)

(3) Final reports of the 8 children who were given medical referrals:

Four had otitis media.
Two hare under treatment for allergies.
One reported negative findings.
One did not receive medical care.

(4) Four children rechecked with normal findings had a history of frequent ear infections.

(5) Five children who did not come in for rechecks are under care of private physicians for ear infections or allergies.

b. Vision

During the past year, also, the Delta Gamma Volunteers carried out preschool screening. Their community service has been to offer vision screening tests. The following data has been summarized and reported fro this important program:

Total number screened. 1,788
Total referred to school nurses. . . . . 114(7%)

Final reports as to validity of the referrals are not yet available.

C. Health Services to assist in health instruction for all pupils

1. Cooperative efforts with instructional personnel on materials and inservice training

New testbooks, posters, movies, and other health teaching aids are regularly reviewed and evaluated before approval or purchase. In both the selection of materials and the production of health instruction materials, the Health Services staff is most concerned to appraise the scientific accuracy of the teaching aids.

Drug education continues to be a popular subject although some inservice training in family life education and other behavioral areas of health instruction are done for teacher groups. The Division works closely with the supervisor of health instruction of the General Curriculum Services.

2. Educational emphases on all health procedures

Elementary pupils particularly are prepared for the routine health services by teacher's or nurse's explanations of what will be done, and why, during such procedures as scalp ringworm inspections, growth measurements, vision and hearing tests, dental inspections, and medical appraisals. As far as possible, the children participate in the procedures and thus gain understanding of them. Occasionally, peer groups of students have contributed also to instruction and motivation of classes in health matters as personal health decisions regarding drugs, eating habits, and dental care, etc.

3. Work with faculties for classroom health units

The nurses offer considerable assistance to all teachers by supplying materials or assisting directly with health instruction. They helped with 954 classroom sessions last year and provided material only in 3,035 instances. Also, the nurses presented or helped with the presentation of sex education talks to 272 groups of girls. The major load in Family Life Education in the elementary schools was carried by the two teachers on special assignment to give leadership in this area of instruction. Considerable help was obtained from the school nurses and some help from school or community physicians, particularly on venereal disease in the secondary schools.

Other health topics such as skin care, tuberculin testing, immunizations, posture, smoking, drugs, population control, and cancer were discussed by school nurses or physicians upon request from teachers.

4. Tuberculosis education and testing in the science program

All of the junior high schools continued to carry out skin-testing procedures, using Tine tests to detect tuberculin sensitivity among those of early adolescent ages. It had been a voluntary program prior to the 1968-1969 school year for those in the eighth grade. Since then it is a city regulation that the schools notify all parents that certificates of Tine testing should be presented to the school by new pupils and by all those in the seventh grade.

For many years, tuberculin skin testing has been a part of the health teaching in all junior high schools. The eighth grade was formerly the designated age group for the instruction and testing and now, to comply with the local health law, the seventh grade group of students are tested.

The last 10 year record of the positive reaction rates denotes a fairly low incidence of past tuberculosis infection in this large group of young adolescents.

1961-1962.	2.7%	1966-1967.	2.06%
1962-1963.	1.1%	1967-1968.	0.8%
1963-1964.	0.9%	1968-1969.	1.1%
1964-1965.	1.27%	1969-1970.	0.6%
1965-1966.	1.6%	1970-1971.	0.6%

The school nurses did the Tine tests under the supervision of one of the nursing coordinators. A total of 6,576 pupils (92%) were tested by the school nurses and nearly another (1%) was done by private physicians and clinics. This left about 7% of these adolescents who failed to have tuberculin tests.

SCHOOL	NUMBER OF PUPILS			NUMBER AND PERCENT OF POSITIVE REACTIONS
	Enrolled	Tested at School	Tested by Private Physician or Clinic	
Baker	278	258	2	8(3.1%)
Byers	389	369	20	1(0.3%)
Cole	284	233	6	1(0.4%)
Gove	235	216	17	0
Grant	269	261	8	3(1.1%)
Hamilton	793	688	105	4(0.5%)
Hill	380	336	31	1(0.3%)
J.F. Kennedy	523	506	17	3(0.6%)
Kepner	490	455	35	1(0.2%)
Kunsmiller	599	593	6	0
Lake	419	392	21	8(1.9%)
Horace Mann	395	375	11	4(1.0%)
Merrill	437	390	47	3(0.7%)
Morey	193	173	11	0
Rishel	410	370	7	0
Skinner	425	395	30	1(0.2%)
Smiley	582	546	4	3(0.5%)
Boettcher	12	11	1	2(16.6%)
Community School*	40	9	23	4(12.5%)
TOTALS	7,153	6,576	402	47(0.6%)

*School for pregnant girls (grades 7 through 12 tested.)

D. Health Services to promote follow-up care and correction

1. Nurse counseling with pupils, parents, teachers, social workers, and other school personnel

School health programs increasingly emphasize the correction of defects, not just their detection. Nurses carry the major responsibility to inform, motivate, and counsel parents and pupils about desirable follow-up for each type of health problem or deficiency. Data listed below give evidence of the extensive efforts made last year.

	ELEMENTARY	JR. HIGH	SR. HIGH	TOTAL
Contacts with pupils for counseling	29,184	29,449	16,889	75,522
Contacts with parents (on pupils):				
Home visits	3,316	740	159	4,215
School conferences	9,185	2,228	649	12,062
Telephone calls	33,221	16,834	11,651	61,706
Contacts with PTA volunteers	357	51	80	488
Contacts with other school personnel:				
Teachers	16,401	3,437	3,261	23,099
Principals	6,087	1,535	661	8,283
Social Workers	5,256	1,849	1,171	8,276
Medical staff(school)	1,112	327	329	1,768
Conferences regarding pupils for "child studies"	1,130	100	43	1,273

The above data reflect less nurse contacts with parents at school and at home but more via telephone. Contacts with PTA volunteers generally declined, although there were more contacts in the high schools. At all levels, nurses were more involved in conferences about pupils with behavior or learning problems, in fact, a significant increase of 28% more pupils.

2. Intercommunications between school health personnel and private physicians or clinics or both

Family or clinic physicians can contribute greatly to the school's understanding of pupils who have important health problems. An easy two-way report blank serves this purpose and allows the health staff to summarize for the doctor the school's concern about an individual child. On the blank a request is made for the pertinent medical comments and suggestions from the family or clinic physician to return to the school.

The two-year summary below reflects greater use of private physicians to assist with school problems.

	1969-1970			1970-1971		
	Elem.	Jr.High	Sr.High	Elem.	Jr.High	Sr.High
Total requests sent private physicians	120	47	14	167	37	15
Total returned	76	33	10	109	26	11
Total requests sent clinics	265	67	6	350	55	20
Total returned	183	48	6	239	49	18
Total for the year: Sent. . . . . 519 Returned. . . 356(69%)				Total for the year: Sent. . . . . 644 Returned. . . 452(70%)		

The school health services are often requested by the family doctors or clinics to furnish observational reports of or test data for the child. Because improvements in child health are best accomplished by teamwork, this sharing of information by writing, calling, or by personal conferences is essential and encouraged, although it is time consuming.

3. Cooperation with other community health agencies

Pupil information is shared and therapy plans integrated with many clinics and agencies.

For instance, last year the school nurses knew of and worked with 190 pupils receiving care from the state Crippled Children's Program and many others receiving care at the clinics at the Denver General Hospital, Denver University Speech and Hearing Clinic, Colorado General Hospital, Children's Hospital, Sewall House, Colorado Hearing Society, the Diagnostic Service for Rheumatic and Congenital Heart Disease, and the Developmental and Evaluation Clinic at Children's Hospital.

E. Health Services to assist with other needs of some pupils

1. Medical appraisal of those with physical, mental, and emotional problems which seem to interfere with learning

Teachers are encouraged to observe children carefully and to report any obvious or suspected health problems to the nurses. Also, pupils with more severe problems are usually discussed with principals and coordinators. Emotional factors are often intertwined with physical conditions, and these pupils benefit by additional help from the social workers and psychologists. It is estimated that from ten to twenty percent of pupils require attention from various personnel auxiliary to the teacher in order to meet and overcome special health and learning problems. Nurses schedule these pupils for appraisal by the school physician whenever medical care seems indicated and is not being obtained from private physicians or in clinics.

2. Placement in special educational classes

Children are referred to special classes when they are found eligible for them. Those with physical handicaps as blindness, deafness, low vision, impaired hearing, cardiac, orthopedic, speech, and other deficiencies are provided with special educational help by the schools. Increasing attention is given to those with perceptual and emotional problems.

Last year, 836 pupils were carefully evaluated for placement in special education classes--an increase of 158 over the number examined in 1969-1970. Their growth was checked, vision and hearing tested, past history obtained, previous medical care noted, and counsel was sought from private and clinic physicians. Then

an educational plan was recommended on the best judgment of all concerned. The new classes for perceptually handicapped pupils started three years ago and have been extended with consulting psychiatrists and other health service staff members giving more time to these special groups.

These services in coordination with those of the Special Education Office, are increasing as 185 more pupils with handicapping conditions were enrolled in special classes this past year.

The following groups of Special Education have received some health services and their enrollments are shown for a 2 year period:

TYPES OF PUPILS	1969-1970	1970-1971
Mentally Retarded (Developmental)	2,200	2,027
Hearing Handicapped	196	171
Visually Handicapped	60	58
Orthopedic, etc. Handicapped (at Boettcher School)	170	193
Educationally Handicapped (Perceptual, emotional, etc. problems)	135	497
TOTALS	2,761	2,946

Fortunately, children and youth with emotional problems now are receiving more care from both community and educational facilities. Our consulting psychiatrist is liaison between the schools and the State Hospital and local mental health treatment centers.

Another group of children with which the department works to arrange school programs is the home-bound and hospital-bound. In 1970-1971, one hundred and two pupils were processed for this tutorial assistance.

3. Contributions of the consultant psychiatrists

The psychiatric consultation program is designed to offer the special skills and insights of psychiatrists in the various areas of the Division of Health Services' responsibilities to school children and to adult staff.

Six psychiatrists have been on the staff and served for a total of 1,510 hours. Services have been varied and often unpredictable, sometimes not amenable to evaluation. The range of major emphases has included the following efforts for:

a. Young Children

(1) A psychiatrist initiated and supervised special service to kindergarten students upon enrollment to establish good relationships with mothers, and to pick up indicators that might suggest learning difficulties. The pilot procedure is now ready for use in all schools.

(2) Direct observation by a child psychiatrist in the classroom to pick up problems in first graders has helped teachers to deal directly with them.

(3) Consultation with advisory boards of the Diagnostic Center, and the Severely Educationally Handicapped Program has helped the staff with problems with these projects.

b. Elementary Children

(1) On request, a psychiatrist has gone to the school to consult with the school staff on problems of a specific child. These consultations may be on a regularly scheduled basis, or only when the need is seen.

(2) A psychiatrist was a member of each Complex Special Service Staff to help with policies, inservice programs, and direct help to teachers.

c. Secondary School Children

(1) On request, a psychiatrist has gone to various schools to consult with the school staff on problems of a specific child.

(2) Additional consultation has been given to administrative personnel, especially around discipline and court liaison problems.

(3) Consultation has been given in drug abuse problems.

(4) Consultation has been given around the special program for pregnant girls (Community School).

d. Teachers

(1) A psychiatrist has helped to evaluate classroom problems and to plan ways of solving them.

(2) Psychiatrists have planned and contributed to inservice programs.

e. Special Service Personnel

(1) Psychiatrists have consulted with individuals or groups about specific problems.

(2) Psychiatrists helped plan and contributed to inservice programs.

f. Administrators

Psychiatrists have:

(1) Consulted with individuals about special problems.

(2) Helped plan and contributed to problem-solving group discussions.

(3) Consulted on policies, e.g., exclusion, suspension, transfer of pupils, riot prevention and control.

(4) Offered help to Special Education Office:

(a) they served on screening committee for the perceptually handicapped.

(b) they provided inservice for coordinators and teachers.

(c) they helped Community School with administrative, policy, and inservice matters.

g. Division of Health Services

A psychiatrist has:

(1) Had increasing responsibility in evaluating adult employees, in referring those who need it for help with emotional illnesses, counselling about immediate problems, and participating in decisions about health leaves.

(2) Carried out official liaison with the Department of Pupil Services.

(3) Served as consultant-participant in staff discussions and decisions regarding policies.

h. Community

Psychiatrists have carried out liaison with agencies (medical-social).

(1) Mental health clinics (direct communication--and in some cases close working cooperation).

(2) Model cities (mental health of school-age children).

An approximate estimate of psychiatric time spent in their major work areas is:

27%.....Services to administrators

24%.....Services to specific pupils with school problems

22%.....Inservice programs to groups on emotional health, management of classroom problems, etc.

17%.....Direct service with school staff members (teachers and others)

8%.....Evaluation of and counselling with adult employees

3%.....Consultant supervision of Community School

4. Dental Clinic services

The schools support a treatment facility for indigent pupils in need of dental care. This was originally developed at the request of and with the help of the Denver Dental Society. It was continued through May 1971 because there is still a great need for dental care for many children and the community resources are unable to give care to many who need it. However, the Board of Education withdrew its sponsorship and most of the budget for the clinic after June 1, 1971.

During 1970-1971 the clinic performed the following work with some decrease in staff:

	NUMBER OF PUPILS TREATED	TOTAL NUMBER OF TREATMENTS	NUMBER OF CASES FINISHED	NUMBER OF BROKEN APPTS.	NUMBER GIVEN EMERGENCY CARE	EXTRACTIONS		FILLINGS	
						Temp.	Perm.	Temp.	Perm.
ELEMENTARY	672	1,689	609	234	96	614	65	1,090	895
JUNIOR HIGH	223	594	213	83	51	42	86	0	532
SENIOR HIGH	81	285	74	38	29	0	35	0	306
TOTAL	976	2,568	896	355	176	656	186	1,090	1,733

One-hundred-seventy-one pupils had their teeth cleaned at the clinic. Whereas 266 had received this type of service in 1969-1970. Also, there were miscellaneous treatments such as Vincent's infection treatments, gingivitis, suture removals, and gentian violet treatments having mostly to do with the gums. This is a big concern with the dental clinic. It is impossible to have healthy teeth if the gums are unhealthy.

There were 61 patients given root canal treatments, 1,229 pulp cappings were done, and 742 x-rays taken. A chronic problem at the Dental Clinic is that of broken appointments. Despite extra effort to remind families of their appointment times, 14% of the patients failed to keep their appointments. This was approximately the same as the previous year when 16% failed to keep appointments.

5. Help in first-aid care of injuries

The Division of Health Services helps to establish policies for the emergency care of accidental injuries. The school nurse is responsible for the first-aid program, equipment, and supplies in the schools. In addition, all employees are required to have some first-aid training. This preparation of the employees assures their competent first-aid care for pupils and thus allows many other important duties which are not first-aid work to be done by the nurse. However, the more serious injuries are cared for by the nurses unless she is out of the building and then pre-arranged plans are carried out.

Last year, they reported first-aid care to 31,941 elementary pupils; 20,616 junior high school pupils; and 6,300 senior high pupils--a total of 58,857 and over 4,000 more cases than in 1969-1970.

All accidental injuries must be reported to the office of Personnel Services and to the Health Education Department. More detailed data are available from the latter office, which collects and analyzes the reports on injuries known at school.

6. Medical reports on "battered" children

Physicians in the central office of the Division of Health Services relay the reported instances of physical abuse of children to the designated authorities as now required in the state law. In the two school years, 1963-64 and 1964-65, there were eighteen cases each year of "battering" of children by various adults. During 1965-66 there were twenty-seven such cases; during 1966-67, forty-two cases; during 1967-68 forty-six cases; during 1968-69 there were forty cases reported; during 1968-70 there were twenty-two cases reported; and during 1970-71 there were twenty-eight cases described as sufficiently serious to report to the legal authorities.

F. Additional Division of Health Services responsibilities

1. Continual evaluation of Division activities

The need to adapt and improve is a continuing one in all areas of the school health services. Focus must be clearly held on the school-related health needs of the pupils and the employees to maintain programs which are most worthwhile and justified. It is often regrettable that the press of routine daily schedules makes it difficult to critically analyze work results. The Division hopes to balance its attention to every day demands with that of prudent planning for more effective future programs.

2. Close rapport and administrative planning with medical and dental profession and with official and non-official health agencies

Last year, the full-time medical staff participated in many health meetings and conferences in the schools, with other school departments, and with city and community health groups. The local public health department furnished some visual-aid materials for health instruction, especially about rabies control, V.D., and drugs. The State Health Department's laboratories have assisted greatly in a limited streptococcus culturing project. Both the city and state health disease control experts assisted with the epidemiology of the infectious hepatitis cases at one elementary school.

An active medical advisory committee meets occasionally to discuss the department's program. A committee of the dental society has offered assistance whenever it has been sought.

Division representatives--both physicians and nurses--participate in the community health groups which deal with tuberculosis, heart disease, mental hygiene, cancer, alcoholism, diabetes, polio, cerebral palsy, hearing loss, blindness and poor vision, mental retardation, drug abuse, smoking and health careers.

3. Continued cooperative programs with other divisions within the schools and with community and civic groups

The Health Services staff is very much aware of its dependence on all other school departments for carrying out its varied kinds of responsibilities. Again, in 1970-71, the PTA health chairmen helped with several of the health projects and gave support to the whole program.

The nurses participated in or attended 535 PTA meetings, 153 preschool meetings, and 1,568 teacher meetings last year.

There were many conferences with staff members of the Visiting Nurses Service and with student teachers. The school nurses assisted in classroom health instruction 954 times and provided

materials or counsel to teachers of health classes on 3,035 separate occasions. They also presented sex education talks to 106 groups in elementary schools, 34 in junior high schools and about 106 groups in the senior high schools.

4. Assistance with health, disability, and retirement leaves for adult personnel

Routine conferences and interviews were held with 206 employees returning to work after leaves or illnesses; with 108 to help arrange for their pregnancy leaves, and with 54 to assist with disability and other retirements.

III. FUTURE PLANS AND RECOMMENDATIONS FOR 1971-1972 ACTIVITIES

A. Citywide extension to all elementary schools of nurse interviews on enrolling kindergarteners

This program was started in 1967 on a pilot basis and has proven worthwhile. Health and educational information is obtained so that optimal planning may follow.

B. First inservice seminar series for staff physicians on detection and management of learning disabilities

As changes occur, both in education and in medicine, continuing education is essential. This seminar series is intended to enhance staff understanding in areas of particular importance. The series is planned for early in the first semester of the 1971-1972 school year.

C. Modified work assignments of dental hygienists to give more time in the most needy schools and do more prophylactic work

The educational and inspection portions of the dental hygienists' work will continue and, in addition, new techniques of dental prophylaxis will be added.

D. Use of the private physicians to appraise and approve high school youth for participation in varsity sports

Planning for this change has gone on for more than a year. The 1971-1972 sports seasons will be the first in which alterations in both local and association regulations permit recommended changes. Guidelines have been prepared for usage by examining physicians so that established standards of participation may be maintained.

E. Analysis and exploration of further educational needs of profoundly deafened pupils

Jointly with the Special Education Office, consideration is being given to the health and educational aspects of both children and programs in the area of deaf education. Such review seems timely in light of developments in both fields.

F. More participation of school consulting psychiatrists in the secondary schools on problems of suicides, drug abuse, and violence

The role of the psychiatric consultant is changing because of changes in both school and community. New emphases and new approaches are occasioned by new problems. Group work with both pupils and faculty is an example. The Department of Secondary Education and individual schools are using psychiatric services more extensively and in innovative ways.

G. Possible cooperation in a health study among pupils with misdemeanor records

In an adjacent area, a pilot health study has been started among secondary school students being serviced by the courts. This program was initiated because this group of young persons with some delinquent behavior seemed to have more health problems than their peers who were not receiving court services. Thus, a comparative study of the type, incidence, and extent of physical and emotional abnormalities was undertaken. Our Division of Health Services has been asked to consider the possibility of a similar project during the coming year.

H. More work with students and hospitals on health careers

A program for a survey course in health careers at one high school has been so well received that exploratory efforts to expand the program have been initiated. Orientation to and knowledge of the opportunities in health associated vocations not only offer rewarding careers to young people but also meet critical manpower needs. Cooperative programs with health facilities are advantageous to all concerned. Further study is anticipated in this area.